



## Water Purity

### Information Provided by the U. S. Environmental Protection Agency

Drinking water sources in the United States, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over or through the ground, it dissolves naturally occurring minerals and, sometimes, radioactive material. Water also picks up substances resulting from animal or human activity.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) regulates the amounts of certain contaminants in water provided by public systems. The Food and Drug Administration regulates contaminants in bottled water to provide the same public health protection.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. Their presence does not necessarily indicate that the water poses a health risk. Information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

### Contaminants that may be present in source (“raw”) water

**Microbial contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**Inorganic contaminants**, such as salts and metals, can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Pesticides and herbicides** come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

**Radioactive contaminants** can be naturally occurring or be the result of oil and gas production and mining activities.

# Bloomington’s Water is Regularly Tested

## 2004 Water Quality Results

The Minnesota Department of Health (MDH) and our own staff regularly test samples of Bloomington’s water for over 140 contaminants. **No contaminants were detected at levels that exceeded the state or federal standards.** Some substances were detected in trace amounts below the maximum allowed in drinking water. Only those substances that were

detected appear on the following table; many test results are not listed because the substances were not found at any time in 2004 by tests designed to detect them. Tests for some substances are performed less than once per year; in such cases, the most recent results are reported along with the date of the test.

The upper portion of the table below summarizes results of tests

performed on Bloomington water. The lower portion shows results for water taken from the distribution system in Minneapolis because we blend their treated surface water with our water plant’s treated groundwater. All of Bloomington’s water is a blend of water from these two sources.

Detected substance	Amount detected	Allowed (MCL)	Ideal (MCLG)	Typical source of substance	Type	Meets standards?
CITY OF BLOOMINGTON						
Bromodichloromethane (ppb)	0.2	NR	NR	Chlorination by-product	NR	Yes
Chlorine (ppm)	0.8 to 1.8	4 MRDL	4 MRDLG	Water additive used to control microbes	R	Yes
Chloroform (ppb)	0.7	NR	NR	Chlorination by-product	NR	Yes
Combined Radium(pCi/l) (03/21/2003)	0.21	5.4	0	Erosion of natural deposits	NR	Yes
Copper (ppm) (Sampled 08/27/2002)	0.26 (0 of 30 sites over AL)	AL= 1.3	NA	Corrosion of household plumbing systems; erosion of natural deposits	NR	Yes
Fluoride (ppm)	Avg. = 1.1 (1.0 to 1.1)	4	4	Added for strong teeth/bones; erosion of natural deposits	R	Yes
Lead (ppb) (Sampled 08/27/2002)	7.0 (1 of 30 sites over AL)	AL = 15	NA	Corrosion of household plumbing systems; erosion of natural deposits	R	Yes
Sodium (ppm)	4.4	NR	NR	Erosion of natural deposits	NR	Yes
Sulfate (ppm)	5.3	NR	NR	Erosion of natural deposits	NR	Yes
Trihalomethanes (TTHM) (ppb)	Avg. = 12 (0.4 to 0.9)	80	0	Chlorination by-product	R	Yes
CITY OF MINNEAPOLIS						
Alpha Emitters (pCi/L) (04/17/2002)	0.4	15	0	Erosion of natural deposits	R	Yes
Chlorine (ppm)	Avg. = 2.7 (1.8 to 3.3)	4 MRDL	4 MRDLG	Water additive used to control microbes	R	Yes
Copper (ppm)	0.21 (0 of 50 sites over AL)	AL = 1.3	NA	Corrosion of household plumbing systems; erosion of natural deposits	R	Yes
Fluoride (ppm)	Avg. = 1.1 (1 to 1.3)	4	4	Added for strong teeth/bones; erosion of natural deposits	R	Yes
Haloacetic Acids (HAA) (ppb)	Avg. = 20.09 (7.1 to 23.7)	60	0	Chlorination by-product	R	Yes
Lead (ppb)	7 (4 of 50 sites over AL)	AL = 15	NA	Corrosion of household plumbing systems; erosion of natural deposits	R	Yes
Nitrate (as Nitrogen) (ppm)	0.16	10	10	Fertilizer runoff; leaching of septic or sewer; erosion of natural deposits	NR	Yes
Sodium (ppm)	8.9	NR	NR	Erosion of natural deposits	NR	Yes
Sulfate (ppm)	23	NR	NR	Erosion of natural deposits	NR	Yes
Trihalomethanes (TTHM)	Avg. 26 (8 to 32)	80	0	Chlorination by-product	R	Yes
Turbidity (NTU)	Max: 0.28 (limit met 100%)	TT	NA	Soil runoff	R	Yes
Total Coliform	1%	5%	0	Bacteria naturally present in the environment	R	Yes
Detected substance	Amount detected	Allowed (MCL)	Ideal (MCLG)	Typical source of substance	Type	Meets standards?

### Key

- MCL

**Maximum Contamination Level.** The highest level allowed in drinking water. MCLs are set as close to MCLG as feasible using the best available treatment technology.
- MCLG

**Maximum Contamination Level Goal.** Below this level there is no known or expected health risk. MCLGs allow for a margin of safety.
- NR

**Not Regulated,** but monitoring is required by the State of Minnesota. No limits have been set for this compound.

- R

**Regulated.**
- NA

**Not Applicable.**
- AL

**Action Level.** An amount that, if exceeded, triggers a specific response that a water system must follow.
- TT

**Treatment Technique.** A required process intended to keep the level of a contaminant at an acceptably low level.
- ppb

**Parts Per Billion.** Units of a substance, in pure form, found in every billion units of water.

- ppm

**Parts Per Million.** Units of a substance, in pure form, found in every million units of water.
- NTU

**Nephelometric Turbidity Unit.** A measure of water clarity.
- pCi/L

**Picocuries Per Liter.** Measures radioactivity.
- MRDL

**Maximum Residual Disinfectant Level.**
- MRDLG

**Maximum Residual Disinfectant Level Goal.**